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To Magnetic Mentor Readers

From Dave Pratt

Date 14 July 2025

Subject **Magnetic Mentor #1 Colour in magnetic Imaging data and Information**

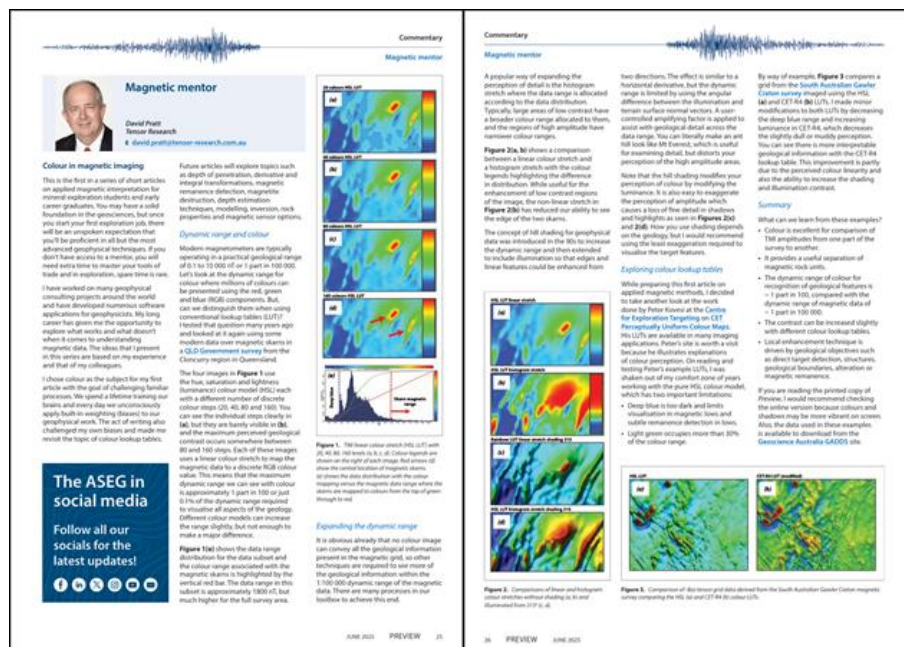
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Summary

I have compiled the datasets that were used in the production of the ASEG Preview article Magnetic Mentor #1 Monochrome imaging June 2025. And they are available at the Tensor Research website at:

<https://www.tensor-research.com.au/magnetic-mentor>.



Draft view of Magnetic Mentor #1 Colour in magnetic imaging.

Useful Links

When appropriate, files used in the preview series of the Magnetic Mentor are made available along with links to related information and publications.

Centre for Exploration Targeting, WA

<https://www.cet.edu.au/>

Peter Kovsi – CET Perceptually Uniform Colour Maps

<https://colorcet.com/download/index.html>

Geoscience Australia data discovery and download

<https://portal.ga.gov.au/persona/gadds>

QLD Geological Survey download site

<https://geoscience.data.qld.gov.au/data/magnetic/mg001370>

Link to magnetic Mentor associated data files

<https://www.tensor-research.com.au/magnetic-mentor>

Reference to Creative Commons Licence introduction

<http://www.ga.gov.au/copyright>

Creative Commons Licence details

<https://creativecommons.org/licenses/by/4.0/>

South Australian Gawler Craton Survey (includes reports and processed results)

<https://www.energymining.sa.gov.au/industry/geological-survey/gssa-projects/gawler-craton-airborne-survey>

Datasets

Data from the Queensland Geological Survey and Geoscience Australia were used in the production of the publication and subsets were produced by cutting the areas of interest out of larger grid areas. The project and datum information is stored in the associated ER Mapper sidecar ERS files.

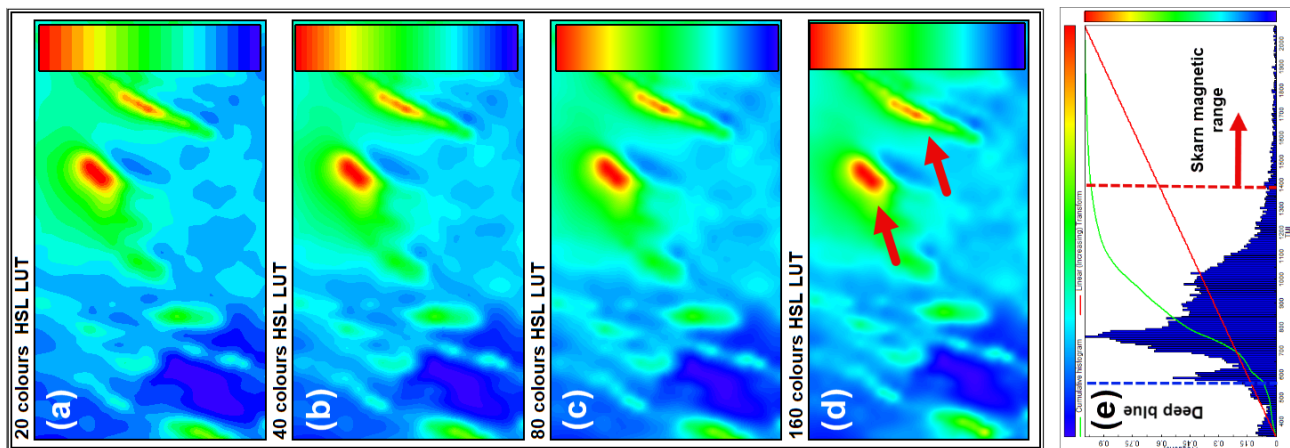
The colour lookup tables used in the production of these images are also in ER Mapper LUT format and I used Discover PA for the production of the image captures. If you need these lookup tables in an alternative format, please email David.Pratt@tensor-research.com.au. These lookup tables are also provided based on the Creative Commons Licence.

File List

The file Magnetic Mentor 1.zip contains the following data files:

14/07/2025	8,855,020	BFzz_inv_Torrens_MM1
14/07/2025	792	BFzz_inv_Torrens_MM1.ers
01/05/2025	64,296	Bm_Cloncurry_Skarns_MM1
01/05/2025	757	Bm_Cloncurry_Skarns_MM1.ers
03/05/2018	9,338	CET-L1.lut
03/05/2018	9,338	CET-L2.lut
28/04/2025	9,338	CET-R4.lut
28/04/2025	4,422	CET-R4_DAP.lut
08/05/2025	7,119,663	CIELAB Paper by Kovesi.pdf
14/07/2025	405,696	Magnetic Mentor 1 Colour in magnetic imaging pv236.pdf
14/07/2025	8,251,166	MM-1 Data Notes.docx
14/07/2025	560,354	CET perceptual Colour Tablesfor Geoscience Applications.zip

Cloncurry Skarn Data



Rotated version of image 1.

Gawler Craton – Torrens Survey

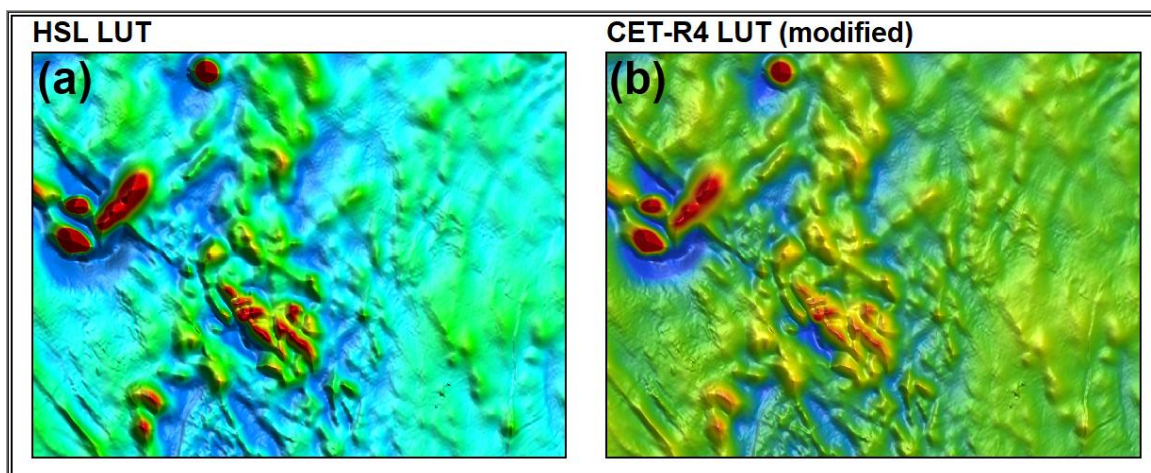


Figure 3. Comparison of -Bzz tensor grid data derived from the South Australian Gawler Craton magnetic survey comparing the HSL (a) and CET-R4 (b) colour LUTs.

Data Sources

Cloncurry Regional data is provided by download from the Geological Survey of Queensland via their Open Data Portal:

[Cloncurry South \(GSQ\) - Cloncurry South \(GSQ\) - Magnetic - GSQ Open Data Portal](#)

The Northern Territory data is provided by download using Geoscience Australia's GADDs data portal:

[Geophysical Archive Data Delivery System](#)



Data Licence

Geophysical data supplied by the Queensland Government and Geoscience Australia is provided under a Creative Commons Licence which requires acknowledgment of the source of the data.

Reference to Creative Commons Licence introduction

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